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GenCore version 5.1.3 Copyright (c) 1993 - 2003 Compugen Ltd.
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OM nucleic - nucleic search, using sw model

January 25, 2003, 22:29:57 ; Search time 2180 Seconds (without alignments) 7013.092 Million cell updates/sec Run on:

US-09-701-023-1_COPY_81_1024 944 1 tggcgacttctctcttcttc.....atttgtccttgaagctttaa 944 Title: Perfect score: Sequence:

IDENTITY_NUC Gapop 10.0 , Gapext 1.0

Scoring table:

16154066 seqs, 8097743376 residues rched: 32308132 al number of hits satisfying chosen parameters:

Minimum DB seq length: 0' Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

EST:* Database :

em_estba:*
em_estbum:*
em_estin:*
em_estin:*
em_estin:*
em_estin:*
em_estin:*
em_btc:*
gb_esti:*
gb_esti:*
gb_esti:*
gb_esti:*

gb_gss:* em_gss_hum:* em_gss_inv:* em_gss_pln:* em_estfun:* em_estom:*

em_gss_mus:* em_gss_other:* em_gss_pro:* em_gss_rod:* em_gss_vrt:* em_gss_fun:* em_gss_mam:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES		Description	B98482 T25H2OTRB T	B67977 T25H20TR TA	BH472044 BOHUA43TR	BH472100 BOHIR55TR	BE188445 PvB 292 L	BE622474 601441274
		8	B98482	B67977	BH472044	BH472100	BE188445	BE622474
		DB	17	17	17	17	10	10
		Query Match Length DB ID	33.1 592 1	508	641	775	645	1672
	dР			31.4	19.3	6.3	4.8	4.3
		ult No. Score		296.8	182.2	59.4	45	41
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		Result No.		υ	υ	υ	ပ	

ALO66056 Drosophil BH154230 ENTR245TF AQ338133 HS_5011_B AL392490 T3 end of BQ115341 EST622756 B1432782 EST535543 BQ115340 EST535543 BQ115340 EST622755 AL436930 T3 end of BG856706 1024047G0 BG990257 NISC_mq12 AL647711 AL647711 AL065880 Drosophil	AZ097834 RPCI-53-4 BI927000 EST556889 BI466529 1e23h04 y BF097623 EST415696 AQ490129 RPCI-11-2 BF587816 FML_33_H1 AL29851 Tetraodon	AL630678 AL630678 BQ418553 Ix46506.y BQ112 T3211-5p6 AL060767 Drosophil AC142455 Pen trog1 AZ938420 ZW0197C06 AZ938420 ZW0197C06 BE51873 BB160016B BB51808 BB615500 BB651818 603382821 AQ850356 LWAJFVI_1	AQ84718 T137820b AQ847422 LMAJFV1_1 AZ75117 2M0007108 BF575807 602134848 AZ25790 RFCI-23-4 BE762203 NXCL_083_ BH077388 RPCI-24-3 AQ630761 RPCI-11-4 AG640879 Pan trog1
CNSO06XP BH154230 AQ338133 CNSO6CGK BQ515341 B1432782 BQ515340 CNSO7ARO BG856706 BQ300257 AL647711 AL647711	A2097834 B1927000 B1466529 BF097623 AQ490219 BF587816 CNS04NC0	AL630678 BQ41855 BQ41855 B21212 CNSO05T AG14249 AZ93842 AZ76895 B151487 BB63550 B1856111 AQ85035	AOB AZ77 AZ77 BF57 AOB AOB AOB
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ALIGNMENTS

	B98482 592 bp DNA linear GSS 31-MAR-1998	T25H2OTRB TAMU Arabidopsis thaliana genomic clone T25H2O, DNA	sednence.	B98482	B98482.1 GI:3000561	GSS.	thale cress.	Arabidopsis thaliana	Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;	Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;	Rosidae; eurosids II; Brassicales; Brassicaceae; Arabidopsis.	1 (bases 1 to 592)	Rounsley, S.D., Field, C.E., Bass, S., Linher, K., Linher, K., Golden, K.	, Berry, K., Granger, D., Suh, E., Wible, C., Adams, M.D. and Venter	,J.C.	A BAC End Sequence Database for Identifying Minimal Overlaps in	Arabidopsis Genomic Sequencing. Update 3	Unpublished (1997)	Other_GSSs: T25H2OTF T25H2OTFB T25H2OTR	Contact: Steve Rounsley	Department of Eukaryotic Genomics	The Institute for Genomic Research	9712 Medical Center Dr., Rockville, MD 20850, USA	Tel: 301 838 0200	Fax: 301 838 0208	Email: rounsley@tigr.org	Seg primer: M13 Reverse
RESULT 1 B98482/c	rocus	DEFINITION		ACCESSION	VERSION	KEYWORDS	SOURCE	ORGANISM				REFERENCE	AUTHORS			TITLE		JOURNAL	COMMENT								

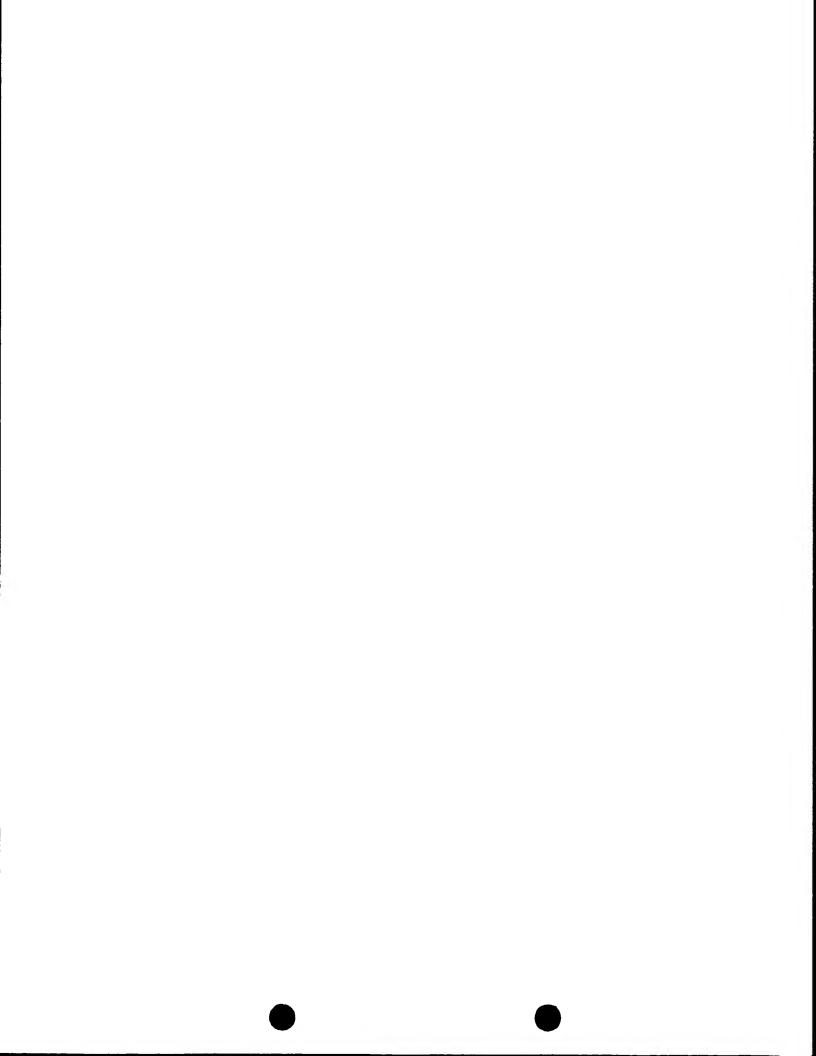
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Rounsley,S.D., Fleld,C.E., Bass,S., Linher,K., Linher,K., Golden,K., Berry,K., Granger,D., Suh,E., Wible,C., Adams,M.D. and Venter
                                                                                                                                                                                                                                                                      529 AGAAGAAACGTITGGATGGGGAATCAGAATAATGTAGTTCGATCCAACGGTGGTGGATTTT 588
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                                                                                                                                                                                                                    DB 17; Length 592;
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                                                                                                                                                                         3 others
                                                      /organism="Arabidopsis thaliana"
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Pred. No. 9.9e-82;
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                                                                                                                                                                                                                                             0; Mismatches
            High quality sequence stop: 592.
Location/Qualifiers
                                                                                                                                                        Produced by Rod Wing"
127 c 91 g 1
                                                                                 /db_xref="taxon:3702"
/clone="T25H20"
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                                                                                                                             /sex="hermaphrodite"
                                                                       /strain="Columbia"
                                                                                                             /clone_lib="TAMU"
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Best Local Similarity 82.1%;
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Class: BAC ends
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                           FEATURES
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/note="Vector: BeloBACII; Site_1: HindIII; Site_2: HindIII; Produced by Rod Wing"
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A BAC End Sequence Database for Identifying Minimal Overlaps in
Arabidopsis Genomic Sequencing. Update 3
Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   531 AAGAAACGTTTGGATGGTGATCAGAATAATGTAGTTCGATCCAACGGTGGTGGATTTTCG 590
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BOHUA43TR BOHU Brassica oleracea genomic clone BOHUA43, DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         90;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 31.4%; Score 296.8; DB 17; Length 508; Best Local Similarity 81.6%; Pred. No. 4.1e-77; Matches 408; Conservative 0; Mismatches 2; Indels 90;
                                             Contact: Steve Rounsley
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850, USA
Fax: 301 838 0208
                                                                                                                                                                                                                                   1. .508
/organism="Arabidopsis thaliana"
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Location/Qualifiers
                                                                                                                                                                                                                                                                                    /db_xref="taxon:3702"
                                                                                                                                                                                                                                                                                                                  /clone_lib="TAMU"
/sex="hermaphrodite"
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                                                                                                                                              Email: rounsley@tigr.org
Seg primer: M13 Reverse
Class: BAC ends
                                                                                                                                                                                                                                                                                                  /clone="T25H20'
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SNRIYCGGVGSGQVMIDPVISPWGFVETSSTTHELSSISNPQMFNASSNNRCDTCFKKKR 180
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                                                                                                                                                                                                                PRT;
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                                                                                                                           GDCSPNTIDLSLKL 314
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STRAIN-CV. NIPPONBARE;
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                                                                                                                                  241 STTINPYFNEATNHTGPMEEFGSYMEGNPRNGSGGVKEYEFFPGKYGERVSVVATTSSLV 300
                                                                      LRGMGVAKLERQRIEEEKKQLAAATVGDTSSVASISNNATRLPVPVDPGVVLQGFPSSLG 120
                                                                                                                                                                     LDGDQNNVVRSNGGGFSKYTMIPPPMNGYDQYLLQSDHHQRSQGFLYDHRIARAASVSAS 240
                                                                                                                                                                                                                               Arabidopsis thatlana (Mouse-ear cress).
Eukaryota: Viridiplantae: Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae;
eurosids II; Brassicales; Brassicaceae; Arabidopsis.
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                                    Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MATSLFFWSTDQNSVGNPNDLLRNTRLVVNSSGEIRTETLKSRGRKPGSKTGQQKQKKPT 60
                     1 MATSLFFMSTDQNSVGNPNDLLRNTRLVVNSSGEIRTETLKSRGRKPGSKTGQQKQKKPT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 314;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Reichert B.J., Barel E., Hoheisel J., Mewes H.W., Mayer K., Schueller C., Bevan M.;
Submitted (JUN-1998) to the EMBL/GenBank/DDBJ databases.
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  0; Indels
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Submitted (MAR-2000) to the EMBL/GenBank/DDBJ databases.
EMBL; AL030978; CAA19727.1; ...
EMBL; AL16156; CAB19588.1; ...
Hypothetical protein.
SEQUENCE 314 AA; 34078 MW; B0236D910544CEC3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                           01-NOV-1998 (TrEMBLrel. 08, Created)
01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
01-OCT-2000 (TrEMBLrel. 15, Last annotation update)
Hypothetical 34.1 kDa protein (NOZZLE/SPOROCYTELESS).
M4122.140 OR AT4C27330.
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Pred. No. 3.5e-130;
0; Mismatches 1;
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  0; Mismatches
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Matches 314; Conservative
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STTINPYFNEATNHIGPMEEFGSYMEGNPRNGSGGVKEYEFFPGKYGERVSVVATTSSLV 300
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Spermatophyta, Magnoliophyta, Lillopsida, Poales, Poaceae,
Ehrhartoideae, Oryzeae, Oryza,
                                37 KNKPKKVPORGLGVAQLEKLRIEEQKKMEGGAALSSHGALGGGDGVLGHLPPPPPPSLAL
LDGDQNNVVRSNGGGFSKYTMIPPPMNGYDQYLLQSDHHQRSQGFLYDHRIARAASVSAS
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8.0%; Score 131; DB 10; Length 320;
Best Local Similarity 21.1%; Pred. No. 0.0049;
Matches 56; Conservative 33; Mismatches 78; Indels 9;
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STRAIN-CV. NIPPONBARE;
Sasaki T., Matsumoto T., Yamamoto K.;
"Oryza satisa nipponbare(GA3) genomic DNA, chromosome 1,
clone:OSJNBa0038J17.";
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01-0cT-2000 (TrEMBLrel. 15, Last sequence update)
01-0CT-2000 (TrEMBLrel. 19, Last annotation update)
Hypothetical protein (OSJNBa0038J17.1 protein).
Oryza sativa (Rice).
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AF146794.1 GI:5007008
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Direct Submission
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RKPGSKTGQOKQKKPTLRGMSVAKLERQRIEBEKKQLAAATVGDTSSVASISNNATRL
PVPVDFQVVLOGFPSSLGSRRIKTGGGVGSQVMLDPVISPWGFVETSSTTHELSSISN
PQMPNASSNNRCDTFCKKRLDGDQNNVRRNGGGFSKYTMIPPPMNGYDQYLLQSDH
HQRSQGFLYDHRIARAASVSASSTTINPYFNBATNHGCBMEEFGSYMBGNPRNGSGGV
KEYEFPGKYGERVYVATTSSLVGBCSPNTIDLSLKL"
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                                                                                              Plant Molecular Genetics, Institute of
Research Link, Singapore 117604, Singapore
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                                               2 (bases 1 to 1302)
Yang,W.-C., Ye,D., Xu,J. and Sundaresan,V.
Direct Submission
Submitted (14-JUN-1999) Plant Molecular Genetics,
Sporogenesis and encodes a novel nuclear protein Genes Dev. 13 (16), 2108-2117 (1999)
                                                                                                                                       /organism="Arabidopsis thaliana"
/cultivar="Landsberg erecta"
/db_xref="taxon:3702"
                                                                                                                                                                                                                                                                          /note="MADS-box related protein"
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/protein_id="AAD45344.1"
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/note="nucleus"
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80. .1024
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Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
Rosidae; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
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Molecular analysis of NOZZLE, a gene involved in pattern formation
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join(1. .531,631. .864,954. .1133)
/gene="NZZ"
/note="involved in ovule and anther development and early
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Schlefthaler,U., Balasubramanian,S., Chevaller,D., Sleber,P. and
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561 CTCAAATGTTTAACGCTTCTTCCAATAATCGCTGTGACACTTGCTTCAAGAAGAAACGTT 620
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Schiefthaler, U., Balasubramanian, S., Sieber, P., Chevaller, D.,
                                                                     TGGATGGTGATCAGAATAATGTAGTTCGATCCAACGGTGGTGGATTTTTCGAAATACACAA
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99432290
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Arabidopsis thallana NOZZLE (NZZ) gene, complete cds.
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Zurlch, Zollikerstr. 107, Zurlch, ZH 8008,
Location/Qualifiers
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/db_xref="taxon:3702"
/chromosome="4"
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/note "there is a mismatch in this homopolimeric stretch
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/db_xref="taxon:3702"
/chromosome="4"
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PQRPRASSNRRCDTCPKKRELDGDQNNVVRSNGGGFSKYTMIPPPMNGYDQYLLQSDH
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                                                                                                                                                                                                                                                                                                                                                                  5;
                                                                                                                                                            sequence presented in GenBank Accession number AL030978"/replace="c"
                                                                                                                                                                                                                                               /note="compared to Arabidopsis thaliana Columbia ecctype sequence presented in GenBank Accession number AL030978" /replace="a"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGAGTCGTGGTCGGAAACCAGGATCGAAGACAGGTCAGCAAAAACAGAAGAAACAACGT 180
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241 TCGCCGCCGCCACAGTCGGAGACACGTCATCAGTAGCATCGATCTTAACAACGCTACCC 300
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                           /protein_id="AAD37775.1"
/db_xref="G1:5007009"
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83.4%;
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Best Local Similarity 83.4
Matches 944; Conservative
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ATF27G19 82381 bp DNA linear PLN 01-JUN-1999
Arabidopsis thaliana DNA chromosome 4, BAC clone F27G19 (ESSA
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Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
Rosidae; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
1 (bases 1 to 82381)
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Duesterhoeft,A., Bancroft,I., Mewes,H.W., Mayer,K.F.X., Lemcke,K.,
Mannhaupt,G. and Schueller,C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Update of the sequencing, project.

EU Arabidopsis sequencing, project.

EU Arabidopsis sequencing, project.

Direct Submission

Submitted (30-MAY-1999) MIPS, at the Max-Planck-Institut fuer

Blochemie, Am Klopferspitz 18a, D-82152 Martinsried, FRG, E-mail:
schuelle@mips.blochem.mpg.de Project

Coordinator: Mike Bevan, Molecular Genetics Department, Cambridge

Laboratory, John Innes Centre, Colney Lane, NR4 7UJ Norwich, UK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           E-mail: michael bevan@bbsrc.ac.uk
Information on performance of analysis and a more detailed
annotation of this entry and other sequences of chromosomes 3, 4
and 5 can be viewed at: http://www.mips.biochem.mpg.de/proj/thal/.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCATAGAATCGCTAGAGCTTCAGTTTCTGCTTCTAGTACTACTATTAATCCTTATT 741
                                                                                                                                                                                                                                                                                             --GGGACCAAT 772
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCAACGAGGCAACAAATCATACGGTACTAAGTATAGTCCATTTATTAATACTCATATATA 901
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                                                                                                             GCTACGATCAGTATCTTCTTCAATCAGATCATCATCAGGAGGAGGCCAAGGTTTCCTTTATG
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